

Daniel Navajas

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

226
papers

29,876
citations

57
h-index

172
g-index

244
ext. papers

34,150
ext. citations

6.8
avg, IF

6.28
L-index

#	Paper	IF	Citations
226	Standardisation of spirometry. <i>European Respiratory Journal</i> , 2005 , 26, 319-38	13.6	10528
225	Interpretative strategies for lung function tests. <i>European Respiratory Journal</i> , 2005 , 26, 948-68	13.6	3735
224	Standardisation of the measurement of lung volumes. <i>European Respiratory Journal</i> , 2005 , 26, 511-22	13.6	1849
223	Standardisation of the single-breath determination of carbon monoxide uptake in the lung. <i>European Respiratory Journal</i> , 2005 , 26, 720-35	13.6	1609
222	General considerations for lung function testing. <i>European Respiratory Journal</i> , 2005 , 26, 153-61	13.6	1351
221	Scaling the microrheology of living cells. <i>Physical Review Letters</i> , 2001 , 87, 148102	7.4	897
220	Force Triggers YAP Nuclear Entry by Regulating Transport across Nuclear Pores. <i>Cell</i> , 2017 , 171, 1397-1410	50.2	1455
219	Microrheology of human lung epithelial cells measured by atomic force microscopy. <i>Biophysical Journal</i> , 2003 , 84, 2071-9	2.9	540
218	Universal physical responses to stretch in the living cell. <i>Nature</i> , 2007 , 447, 592-5	50.4	537
217	Collective cell durotaxis emerges from long-range intercellular force transmission. <i>Science</i> , 2016 , 353, 1157-61	33.3	320
216	Time scale and other invariants of integrative mechanical behavior in living cells. <i>Physical Review E</i> , 2003 , 68, 041914	2.4	271
215	Effectiveness of CPAP treatment in daytime function in sleep apnea syndrome: a randomized controlled study with an optimized placebo. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2001 , 164, 608-13	10.2	267
214	Probing mechanical properties of living cells by atomic force microscopy with blunted pyramidal cantilever tips. <i>Physical Review E</i> , 2005 , 72, 021914	2.4	250
213	Automatic control of tracheal tube cuff pressure in ventilated patients in semirecumbent position: a randomized trial. <i>Critical Care Medicine</i> , 2007 , 35, 1543-9	1.4	167
212	Force loading explains spatial sensing of ligands by cells. <i>Nature</i> , 2017 , 552, 219-224	50.4	163
211	Micropatterning of single endothelial cell shape reveals a tight coupling between nuclear volume in G1 and proliferation. <i>Biophysical Journal</i> , 2008 , 94, 4984-95	2.9	155
210	Intermittent hypoxia enhances cancer progression in a mouse model of sleep apnoea. <i>European Respiratory Journal</i> , 2012 , 39, 215-7	13.6	148

209	Mechanical properties of cultured human airway smooth muscle cells from 0.05 to 0.4 Hz. <i>Journal of Applied Physiology</i> , 2000 , 89, 1619-32	3.7	138
208	Evaluation of nasal prongs for estimating nasal flow. <i>American Journal of Respiratory and Critical Care Medicine</i> , 1997 , 155, 211-5	10.2	134
207	Past, present and future of atomic force microscopy in life sciences and medicine. <i>Journal of Molecular Recognition</i> , 2007 , 20, 418-31	2.6	134
206	Correction of Microrheological Measurements of Soft Samples with Atomic Force Microscopy for the Hydrodynamic Drag on the Cantilever. <i>Langmuir</i> , 2002 , 18, 716-721	4	134
205	Intermittent hypoxia alters gut microbiota diversity in a mouse model of sleep apnoea. <i>European Respiratory Journal</i> , 2015 , 45, 1055-65	13.6	129
204	Alzheimer's Disease Mutant Mice Exhibit Reduced Brain Tissue Stiffness Compared to Wild-type Mice in both Normoxia and following Intermittent Hypoxia Mimicking Sleep Apnea. <i>Frontiers in Neurology</i> , 2018 , 9, 1	4.1	124
203	Standardized Nanomechanical Atomic Force Microscopy Procedure (SNAP) for Measuring Soft and Biological Samples. <i>Scientific Reports</i> , 2017 , 7, 5117	4.9	123
202	Stability of microfabricated high aspect ratio structures in poly(dimethylsiloxane). <i>Langmuir</i> , 2005 , 21, 5542-8	4	122
201	Measurement of cell microrheology by magnetic twisting cytometry with frequency domain demodulation. <i>Journal of Applied Physiology</i> , 2001 , 91, 1152-9	3.7	116
200	Viscoelasticity of human alveolar epithelial cells subjected to stretch. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2004 , 287, L1025-34	5.8	110
199	Intermittent hypoxia increases melanoma metastasis to the lung in a mouse model of sleep apnea. <i>Respiratory Physiology and Neurobiology</i> , 2013 , 186, 303-7	2.8	106
198	Obesity and intermittent hypoxia increase tumor growth in a mouse model of sleep apnea. <i>Sleep Medicine</i> , 2012 , 13, 1254-60	4.6	92
197	Response of automatic continuous positive airway pressure devices to different sleep breathing patterns: a bench study. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2002 , 166, 469-73	10.2	91
196	Hydraulic fracture during epithelial stretching. <i>Nature Materials</i> , 2015 , 14, 343-51	2.7	87
195	Vascular smooth muscle cell phenotypic changes in patients with Marfan syndrome. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2015 , 35, 960-72	9.4	86
194	The local microenvironment limits the regenerative potential of the mouse neonatal heart. <i>Science Advances</i> , 2018 , 4, eaao5553	14.3	84
193	Electroencephalographic slowing heralds mild cognitive impairment in idiopathic REM sleep behavior disorder. <i>Sleep Medicine</i> , 2010 , 11, 534-9	4.6	81
192	Accuracy of thermistors and thermocouples as flow-measuring devices for detecting hypopnoeas. <i>European Respiratory Journal</i> , 1998 , 11, 179-82	13.6	81

191	Tissue oxygenation in brain, muscle, and fat in a rat model of sleep apnea: differential effect of obstructive apneas and intermittent hypoxia. <i>Sleep</i> , 2011 , 34, 1127-33	1.1	80
190	Cytoskeletal mechanics in adherent human airway smooth muscle cells: probe specificity and scaling of protein-protein dynamics. <i>American Journal of Physiology - Cell Physiology</i> , 2004 , 287, C643-54	5.4	77
189	Assessment of airflow obstruction during CPAP by means of forced oscillation in patients with sleep apnea. <i>American Journal of Respiratory and Critical Care Medicine</i> , 1998 , 157, 1526-30	10.2	77
188	Noninvasive monitoring of respiratory mechanics during sleep. <i>European Respiratory Journal</i> , 2004 , 24, 1052-60	13.6	75
187	Vibration enhances interleukin-8 release in a cell model of snoring-induced airway inflammation. <i>Sleep</i> , 2005 , 28, 1312-6	1.1	73
186	Rheology of passive and adhesion-activated neutrophils probed by atomic force microscopy. <i>Biophysical Journal</i> , 2006 , 91, 3508-18	2.9	72
185	Snail1-expressing fibroblasts in the tumor microenvironment display mechanical properties that support metastasis. <i>Cancer Research</i> , 2015 , 75, 284-95	10.1	69
184	Effects of freezing/thawing on the mechanical properties of decellularized lungs. <i>Journal of Biomedical Materials Research - Part A</i> , 2014 , 102, 413-9	5.4	67
183	Respiratory input impedance in anesthetized paralyzed patients. <i>Journal of Applied Physiology</i> , 1990 , 69, 1372-9	3.7	67
182	Physical principles of membrane remodelling during cell mechanoadaptation. <i>Nature Communications</i> , 2015 , 6, 7292	17.4	66
181	Performance of nasal prongs in sleep studies : spectrum of flow-related events. <i>Chest</i> , 2001 , 119, 442-50	5.3	66
180	Mechanobiology in lung epithelial cells: measurements, perturbations, and responses. <i>Comprehensive Physiology</i> , 2012 , 2, 1-29	7.7	64
179	Probing Micromechanical Properties of the Extracellular Matrix of Soft Tissues by Atomic Force Microscopy. <i>Journal of Cellular Physiology</i> , 2017 , 232, 19-26	7	63
178	Sham continuous positive airway pressure for placebo-controlled studies in sleep apnoea. <i>Lancet, The</i> , 1999 , 353, 1154	4.0	63
177	Lung tissue rheology and 1/f noise. <i>Annals of Biomedical Engineering</i> , 1994 , 22, 674-81	4.7	63
176	Effect of body posture on respiratory impedance. <i>Journal of Applied Physiology</i> , 1988 , 64, 194-9	3.7	63
175	Mapping cell-matrix stresses during stretch reveals inelastic reorganization of the cytoskeleton. <i>Biophysical Journal</i> , 2008 , 95, 464-71	2.9	61
174	Noninvasive detection of expiratory flow limitation in COPD patients during nasal CPAP. <i>European Respiratory Journal</i> , 2006 , 27, 983-91	13.6	61

173	Dynamic viscoelastic nonlinearity of lung parenchymal tissue. <i>Journal of Applied Physiology</i> , 1995 , 79, 348-56	3.7	61
172	A comprehensive evaluation of popular proteomics software workflows for label-free proteome quantification and imputation. <i>Briefings in Bioinformatics</i> , 2018 , 19, 1344-1355	13.4	60
171	The temperature dependence of cell mechanics measured by atomic force microscopy. <i>Physical Biology</i> , 2009 , 6, 025009	3	58
170	Upper-airway inflammation triggered by vibration in a rat model of snoring. <i>Sleep</i> , 2007 , 30, 225-7	1.1	57
169	Local micromechanical properties of decellularized lung scaffolds measured with atomic force microscopy. <i>Acta Biomaterialia</i> , 2013 , 9, 6852-9	10.8	56
168	Rat model of chronic recurrent airway obstructions to study the sleep apnea syndrome. <i>Sleep</i> , 2007 , 30, 930-3	1.1	56
167	Relevance of linearizing nasal prongs for assessing hypopneas and flow limitation during sleep. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2001 , 163, 494-7	10.2	56
166	Inspiratory dynamic obstruction detected by forced oscillation during CPAP. A model study. <i>American Journal of Respiratory and Critical Care Medicine</i> , 1997 , 155, 952-6	10.2	54
165	Thrombin and histamine induce stiffening of alveolar epithelial cells. <i>Journal of Applied Physiology</i> , 2005 , 98, 1567-74	3.7	54
164	Importance of the pulse oximeter averaging time when measuring oxygen desaturation in sleep apnea. <i>Sleep</i> , 1998 , 21, 386-90	1.1	54
163	Ventilation-perfusion mismatch after methacholine challenge in patients with mild bronchial asthma. <i>The American Review of Respiratory Disease</i> , 1991 , 144, 88-94		51
162	Automatic regulation of the cuff pressure in endotracheally-intubated patients. <i>European Respiratory Journal</i> , 2002 , 20, 1010-3	13.6	50
161	Bench model to simulate upper airway obstruction for analyzing automatic continuous positive airway pressure devices. <i>Chest</i> , 2006 , 130, 350-61	5.3	48
160	Nasal prongs in the detection of sleep-related disordered breathing in the sleep apnoea/hypopnoea syndrome. <i>European Respiratory Journal</i> , 1998 , 11, 880-3	13.6	47
159	Effects of the decellularization method on the local stiffness of acellular lungs. <i>Tissue Engineering - Part C: Methods</i> , 2014 , 20, 412-22	2.9	44
158	Inhomogeneity of local stiffness in the extracellular matrix scaffold of fibrotic mouse lungs. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014 , 37, 186-95	4.1	43
157	Male fertility is reduced by chronic intermittent hypoxia mimicking sleep apnea in mice. <i>Sleep</i> , 2014 , 37, 1757-65	1.1	41
156	A system to generate simultaneous forced oscillation and continuous positive airway pressure. <i>European Respiratory Journal</i> , 1997 , 10, 1349-53	13.6	41

155	Pre-treatment with mesenchymal stem cells reduces ventilator-induced lung injury. <i>European Respiratory Journal</i> , 2012 , 40, 939-48	13.6	40
154	Clinical application of the forced oscillation technique for CPAP titration in the sleep apnea/hypopnea syndrome. <i>American Journal of Respiratory and Critical Care Medicine</i> , 1999 , 160, 1550-4 ^{10.2}	10.2	40
153	Heterogeneous micromechanical properties of the extracellular matrix in healthy and infarcted hearts. <i>Acta Biomaterialia</i> , 2014 , 10, 3235-42	10.8	38
152	Upper airway collapse and reopening induce inflammation in a sleep apnoea model. <i>European Respiratory Journal</i> , 2008 , 32, 399-404	13.6	38
151	Collapsible upper airway segment to study the obstructive sleep apnea/hypopnea syndrome in rats. <i>Respiratory Physiology and Neurobiology</i> , 2003 , 136, 199-209	2.8	37
150	Bidirectional mechanobiology between cells and their local extracellular matrix probed by atomic force microscopy. <i>Seminars in Cell and Developmental Biology</i> , 2018 , 73, 71-81	7.5	36
149	Definition of COPD: based on evidence or opinion?. <i>European Respiratory Journal</i> , 2008 , 31, 681-2	13.6	36
148	Cell dynamic adhesion and elastic properties probed with cylindrical atomic force microscopy cantilever tips. <i>Journal of Molecular Recognition</i> , 2007 , 20, 459-66	2.6	35
147	Thrombin-induced contraction in alveolar epithelial cells probed by traction microscopy. <i>Journal of Applied Physiology</i> , 2006 , 101, 512-20	3.7	35
146	Biological consequences of oxygen desaturation and respiratory effort in an acute animal model of obstructive sleep apnea (OSA). <i>Sleep Medicine</i> , 2009 , 10, 892-7	4.6	34
145	Forced oscillation technique for the evaluation of severe sleep apnoea/hypopnoea syndrome: a pilot study. <i>European Respiratory Journal</i> , 1998 , 11, 1128-34	13.6	34
144	In vitro comparative study of two decellularization protocols in search of an optimal myocardial scaffold for recellularization. <i>American Journal of Translational Research (discontinued)</i> , 2015 , 7, 558-73	3	33
143	Head-to-head comparison of two engineered cardiac grafts for myocardial repair: From scaffold characterization to pre-clinical testing. <i>Scientific Reports</i> , 2018 , 8, 6708	4.9	32
142	A Novel Chip for Cyclic Stretch and Intermittent Hypoxia Cell Exposures Mimicking Obstructive Sleep Apnea. <i>Frontiers in Physiology</i> , 2016 , 7, 319	4.6	32
141	Obstructive apneas induce early release of mesenchymal stem cells into circulating blood. <i>Sleep</i> , 2009 , 32, 117-9	1.1	31
140	Role of Cyclooxygenase-2 on Intermittent Hypoxia-Induced Lung Tumor Malignancy in a Mouse Model of Sleep Apnea. <i>Scientific Reports</i> , 2017 , 7, 44693	4.9	30
139	Changes in oxygen partial pressure of brain tissue in an animal model of obstructive apnea. <i>Respiratory Research</i> , 2010 , 11, 3	7.3	30
138	Servocontrolled generator to measure respiratory impedance from 0.25 to 26 Hz in ventilated patients at different PEEP levels. <i>European Respiratory Journal</i> , 1995 , 8, 1222-7	13.6	30

137	Human respiratory impedance from 8 to 256 Hz corrected for upper airway shunt. <i>Journal of Applied Physiology</i> , 1989 , 67, 1973-81	3.7	30
136	Differential Oxygenation in Tumor Microenvironment Modulates Macrophage and Cancer Cell Crosstalk: Novel Experimental Setting and Proof of Concept. <i>Frontiers in Oncology</i> , 2019 , 9, 43	5.3	30
135	Proteomics Analysis of Extracellular Matrix Remodeling During Zebrafish Heart Regeneration. <i>Molecular and Cellular Proteomics</i> , 2019 , 18, 1745-1755	7.6	29
134	Low-cost, easy-to-build noninvasive pressure support ventilator for under-resourced regions: open source hardware description, performance and feasibility testing. <i>European Respiratory Journal</i> , 2020 , 55,	13.6	29
133	Mechanical properties of mouse lungs along organ decellularization by sodium dodecyl sulfate. <i>Respiratory Physiology and Neurobiology</i> , 2014 , 200, 1-5	2.8	29
132	Mechanical properties of acellular mouse lungs after sterilization by gamma irradiation. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014 , 40, 168-177	4.1	29
131	A correction procedure for the asymmetry of differential pressure transducers in respiratory impedance measurements. <i>IEEE Transactions on Biomedical Engineering</i> , 1989 , 36, 1137-40	5	29
130	Telemedicine-based approach for obstructive sleep apnea management: building evidence. <i>Interactive Journal of Medical Research</i> , 2014 , 3, e6	2.1	29
129	A New mHealth application to support treatment of sleep apnoea patients. <i>Journal of Telemedicine and Telecare</i> , 2017 , 23, 14-18	6.8	28
128	Integrin-specific mechanoresponses to compression and extension probed by cylindrical flat-ended AFM tips in lung cells. <i>PLoS ONE</i> , 2012 , 7, e32261	3.7	28
127	Telemetric CPAP titration at home in patients with sleep apnea-hypopnea syndrome. <i>Sleep Medicine</i> , 2011 , 12, 153-7	4.6	27
126	Morbidity due to obstructive sleep apnea: insights from animal models. <i>Current Opinion in Pulmonary Medicine</i> , 2008 , 14, 530-6	3	27
125	Intermittent Hypoxia Severity in Animal Models of Sleep Apnea. <i>Frontiers in Physiology</i> , 2018 , 9, 1556	4.6	27
124	Rapid detection of sepsis in rats through volatile organic compounds in breath. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2012 , 881-882, 76-82	3.2	26
123	Performance of mechanical ventilators at the patient's home: a multicentre quality control study. <i>Thorax</i> , 2006 , 61, 400-4	7.3	26
122	Oscillatory resistance measured during noninvasive proportional assist ventilation. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2001 , 164, 790-4	10.2	26
121	Development of a three-dimensional bone-like construct in a soft self-assembling peptide matrix. <i>Tissue Engineering - Part A</i> , 2013 , 19, 870-81	3.9	25
120	Effects of halothane and isoflurane on ventilation and occlusion pressure. <i>Anesthesiology</i> , 1994 , 81, 563-71	7.1	25

119	Pressure- and flow-controlled media perfusion differently modify vascular mechanics in lung decellularization. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015 , 49, 69-79	4.1	24
118	Continuous positive airway pressure (CPAP) induces early nasal inflammation. <i>Sleep</i> , 2008 , 31, 127-31	1.1	24
117	Effect of stretch on structural integrity and micromechanics of human alveolar epithelial cell monolayers exposed to thrombin. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2006 , 290, L1104-10	5.8	24
116	Noninvasive assessment of respiratory resistance in severe chronic respiratory patients with nasal CPAP. <i>European Respiratory Journal</i> , 2000 , 15, 314-9	13.6	24
115	Respiratory mechanics in ventilated COPD patients: forced oscillation versus occlusion techniques. <i>European Respiratory Journal</i> , 1998 , 12, 170-6	13.6	24
114	Finite element simulation for the mechanical characterization of soft biological materials by atomic force microscopy. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016 , 62, 222-235	4.1	24
113	Effects of Sustained and Intermittent Hypoxia on Human Lung Cancer Cells. <i>American Journal of Respiratory Cell and Molecular Biology</i> , 2019 , 61, 540-544	5.7	23
112	Brain tissue hypoxia and oxidative stress induced by obstructive apneas is different in young and aged rats. <i>Sleep</i> , 2014 , 37, 1249-56	1.1	23
111	Elastic properties of hydrogels and decellularized tissue sections used in mechanobiology studies probed by atomic force microscopy. <i>Microscopy Research and Technique</i> , 2017 , 80, 85-96	2.8	23
110	Effect of expiratory flow limitation on respiratory mechanical impedance: a model study. <i>Journal of Applied Physiology</i> , 1996 , 81, 2399-406	3.7	23
109	Static and dynamic upper airway obstruction in sleep apnea: role of the breathing gas properties. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2003 , 168, 659-63	10.2	22
108	Forced oscillation assessment of respiratory mechanics in ventilated patients. <i>Critical Care</i> , 2001 , 5, 3-9	10.8	22
107	Intermittent Hypoxia Mimicking Sleep Apnea Increases Passive Stiffness of Myocardial Extracellular Matrix. A Multiscale Study. <i>Frontiers in Physiology</i> , 2018 , 9, 1143	4.6	22
106	Fibroblast viability and phenotypic changes within glycated stiffened three-dimensional collagen matrices. <i>Respiratory Research</i> , 2015 , 16, 82	7.3	21
105	Low oxygen tension enhances the generation of lung progenitor cells from mouse embryonic and induced pluripotent stem cells. <i>Physiological Reports</i> , 2014 , 2, e12075	2.6	21
104	Forced oscillation total respiratory resistance and spontaneous breathing lung resistance in COPD patients. <i>European Respiratory Journal</i> , 1999 , 14, 172-8	13.6	21
103	Obstructive apneas induce early activation of mesenchymal stem cells and enhancement of endothelial wound healing. <i>Respiratory Research</i> , 2010 , 11, 91	7.3	20
102	Flow-dependent positive airway pressure to maintain airway patency in sleep apnea-hypopnea syndrome. <i>American Journal of Respiratory and Critical Care Medicine</i> , 1998 , 157, 1855-63	10.2	20

101	Leaves of isoprene-emitting tobacco plants maintain PSII stability at high temperatures. <i>New Phytologist</i> , 2019 , 223, 1307-1318	9.8	19
100	Early and mid-term effects of obstructive apneas in myocardial injury and inflammation. <i>Sleep Medicine</i> , 2011 , 12, 1037-40	4.6	19
99	Evaluation of a simplified oscillation technique for assessing airway obstruction in sleep apnoea. <i>European Respiratory Journal</i> , 2001 , 17, 456-61	13.6	19
98	A new estimator to minimize the error due to breathing in the measurement of respiratory impedance. <i>IEEE Transactions on Biomedical Engineering</i> , 1988 , 35, 1001-5	5	19
97	Nonlinear elasticity of the lung extracellular microenvironment is regulated by macroscale tissue strain. <i>Acta Biomaterialia</i> , 2019 , 92, 265-276	10.8	18
96	Barrier-protective effects of activated protein C in human alveolar epithelial cells. <i>PLoS ONE</i> , 2013 , 8, e56965	3.7	18
95	Early Impairment of Lung Mechanics in a Murine Model of Marfan Syndrome. <i>PLoS ONE</i> , 2016 , 11, e0152124	12.4	18
94	Polarized cortical tension drives zebrafish epiboly movements. <i>EMBO Journal</i> , 2017 , 36, 25-41	13	17
93	Silk-Reinforced Collagen Hydrogels with Raised Multiscale Stiffness for Mesenchymal Cells 3D Culture. <i>Tissue Engineering - Part A</i> , 2020 , 26, 358-370	3.9	17
92	Aging Reduces Intermittent Hypoxia-induced Lung Carcinoma Growth in a Mouse Model of Sleep Apnea. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2018 , 198, 1234-1236	10.2	17
91	Density dependence of respiratory input and transfer impedances in humans. <i>Journal of Applied Physiology</i> , 1988 , 65, 928-33	3.7	17
90	Assessment of bronchial reactivity by forced oscillation admittance avoids the upper airway artefact. <i>European Respiratory Journal</i> , 1999 , 13, 761-6	13.6	17
89	Potential role of adult stem cells in obstructive sleep apnea. <i>Frontiers in Neurology</i> , 2012 , 3, 112	4.1	16
88	Mesenchymal stem cells reduce inflammation in a rat model of obstructive sleep apnea. <i>Respiratory Physiology and Neurobiology</i> , 2010 , 172, 210-2	2.8	16
87	Analog circuit for real-time computation of respiratory mechanical impedance in sleep studies. <i>IEEE Transactions on Biomedical Engineering</i> , 1997 , 44, 1156-9	5	16
86	Oscillometric assessment of airway obstruction in a mechanical model of vocal cord dysfunction. <i>Journal of Biomechanics</i> , 2004 , 37, 37-43	2.9	16
85	Quality control of mechanical ventilation at the patient's home. <i>Intensive Care Medicine</i> , 2003 , 29, 484-6	14.5	16
84	Animal model of unilateral ventilator-induced lung injury. <i>Intensive Care Medicine</i> , 2005 , 31, 487-90	14.5	16

83	A portable forced oscillation device for respiratory home monitoring. <i>European Respiratory Journal</i> , 2002 , 19, 146-50	13.6	16
82	Is Telemedicine a Key Tool for Improving Continuous Positive Airway Pressure Adherence in Patients with Sleep Apnea?. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2018 , 197, 12-14	10.2	15
81	Thermal activation and ATP dependence of the cytoskeleton remodeling dynamics. <i>Physical Review E</i> , 2009 , 79, 051920	2.4	15
80	Gas Partial Pressure in Cultured Cells: Patho-Physiological Importance and Methodological Approaches. <i>Frontiers in Physiology</i> , 2018 , 9, 1803	4.6	15
79	Chronic intermittent hypoxia preserves bone density in a mouse model of sleep apnea. <i>Respiratory Physiology and Neurobiology</i> , 2013 , 189, 646-8	2.8	14
78	First-in-human PeriCord cardiac bioimplant: Scalability and GMP manufacturing of an allogeneic engineered tissue graft. <i>EBioMedicine</i> , 2020 , 54, 102729	8.8	14
77	Assessment of upper airway mechanics during sleep. <i>Respiratory Physiology and Neurobiology</i> , 2008 , 163, 74-81	2.8	13
76	Time-domain digital filter to improve signal-to-noise ratio in respiratory impedance measurements. <i>Medical and Biological Engineering and Computing</i> , 1991 , 29, 18-24	3.1	13
75	Analysis of the dynamic characteristics of pressure transducers for studying respiratory mechanics at high frequencies. <i>Medical and Biological Engineering and Computing</i> , 1989 , 27, 531-7	3.1	13
74	Evaluation of a method for assessing respiratory mechanics during noninvasive ventilation. <i>European Respiratory Journal</i> , 2000 , 16, 704-9	13.6	13
73	A bioreactor for subjecting cultured cells to fast-rate intermittent hypoxia. <i>Respiratory Physiology and Neurobiology</i> , 2012 , 182, 47-52	2.8	12
72	Non-invasive system for applying airway obstructions to model obstructive sleep apnea in mice. <i>Respiratory Physiology and Neurobiology</i> , 2011 , 175, 164-8	2.8	12
71	Unsupervised self-testing of airway obstruction by forced oscillation at the patient's home. <i>European Respiratory Journal</i> , 2003 , 22, 668-71	13.6	12
70	Forced oscillation measurements do not affect upper airway muscle tone or sleep in clinical studies. <i>European Respiratory Journal</i> , 2001 , 18, 335-9	13.6	12
69	A simplified method for monitoring respiratory impedance during continuous positive airway pressure. <i>European Respiratory Journal</i> , 2000 , 15, 185-91	13.6	12
68	Cost-effectiveness of a new internet-based monitoring tool for neonatal post-discharge home care. <i>Journal of Medical Internet Research</i> , 2013 , 15, e38	7.6	12
67	Lung bioengineering: physical stimuli and stem/progenitor cell biology interplay towards biofabricating a functional organ. <i>Respiratory Research</i> , 2016 , 17, 161	7.3	12
66	Comparative assessment of several automatic CPAP devices Responses: a bench test study. <i>ERJ Open Research</i> , 2015 , 1,	3.5	11

65	Potential rebreathing after continuous positive airway pressure failure during sleep. <i>Chest</i> , 2002 , 121, 196-200	5.3	11
64	Assessment of respiratory pressure-volume nonlinearity in rabbits during mechanical ventilation. <i>Journal of Applied Physiology</i> , 1996 , 80, 1637-48	3.7	11
63	Effects of two different decellularization routes on the mechanical properties of decellularized lungs. <i>PLoS ONE</i> , 2017 , 12, e0178696	3.7	11
62	Technology for noninvasive mechanical ventilation: looking into the black box. <i>ERJ Open Research</i> , 2016 , 2,	3.5	11
61	Behavior of vascular resistance undergoing various pressure insufflation and perfusion on decellularized lungs. <i>Journal of Biomechanics</i> , 2016 , 49, 1230-1232	2.9	10
60	Antioxidant effect of human adult adipose-derived stromal stem cells in alveolar epithelial cells undergoing stretch. <i>Respiratory Physiology and Neurobiology</i> , 2013 , 188, 1-8	2.8	10
59	Frequency and magnitude of intermittent hypoxia modulate endothelial wound healing in a cell culture model of sleep apnea. <i>Journal of Applied Physiology</i> , 2017 , 123, 1047-1054	3.7	10
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